

RCRA Basics

What every business should know

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What's the big deal?



Today's focus

1. Is your waste regulated by RCRA?
2. Is your business conditionally exempt?
3. What's required?
4. Where can you get help?

1. Is your waste regulated ?

Maybe, but first you have to ask:

- Is it a solid waste?
- Is it excluded or exempted?
- Does it designate as hazardous (or dangerous)?

“Solid Waste”?

- Liquids, solids or gases.
- Discarded, disposed, abandoned materials.
- Certain recycled materials, and materials accumulated and stored prior to recycling.
- “Inherently waste-like” stuff.



Is it excluded?

- Material may be *excluded* from the definition of a solid waste if it is recycled in certain ways.

Examples

- Material returned (as is) to the original process
- Material used as a substitute in another process

What about *these* recycled wastes?

- Used oil
- Spent antifreeze
- Lead-acid batteries
universal waste
- Waste containing
precious metals
- NOT exempted or
excluded from
regulation, but get a
fair 'break'.
- Must be managed
appropriately prior to
recycling,
reclamation, and
recovery.

Is it exempted?

Examples

- Some material is *exempted* from regulation, even though its solid waste.
 - Household waste
 - Asphaltic materials
 - Roofing tars
 - Lab samples
 - Shredded circuit boards
- ... and many more.

Does it designate?



Waste designation tools

- Knowledge of process, chemical formulations, Material Safety Data Sheets (MSDS)
- Results from analytical testing



Does it designate?

- **Listed** discarded chemical product
- **Listed** dangerous waste source
- **Characteristic** dangerous waste
- **WA state-only** dangerous waste
 - Solid corrosives (-090)
 - Certain PCBs (-082)
 - Criteria waste (toxicity & persistence) (-100)

Listed discarded chemical product: P- & U-lists

- Refer to chemical lists
 - P-listed are acutely toxic (*quick death*)
 - U-listed are toxic (*slightly slower death*)
- Include residue or contaminated stuff
- Key: “sole active ingredient”

Listed dangerous waste source: F- & K-list

- Sources listed in -9904
 - Non-specific sources (F-listed)
 - Specific sources (K-listed)
- Include residue & contaminated stuff
- Check the QEL
- WA-only PCB source (W001)

Characteristic Waste

- Ignitable (D001)
- Corrosive (D002)
- Reactive (D003)
- Toxic (D004 - D043)



Ignitable (D001)



- Flashpoint $< 140^{\circ}\text{ F}$
- Unstable solid/gas
- Oxidizers

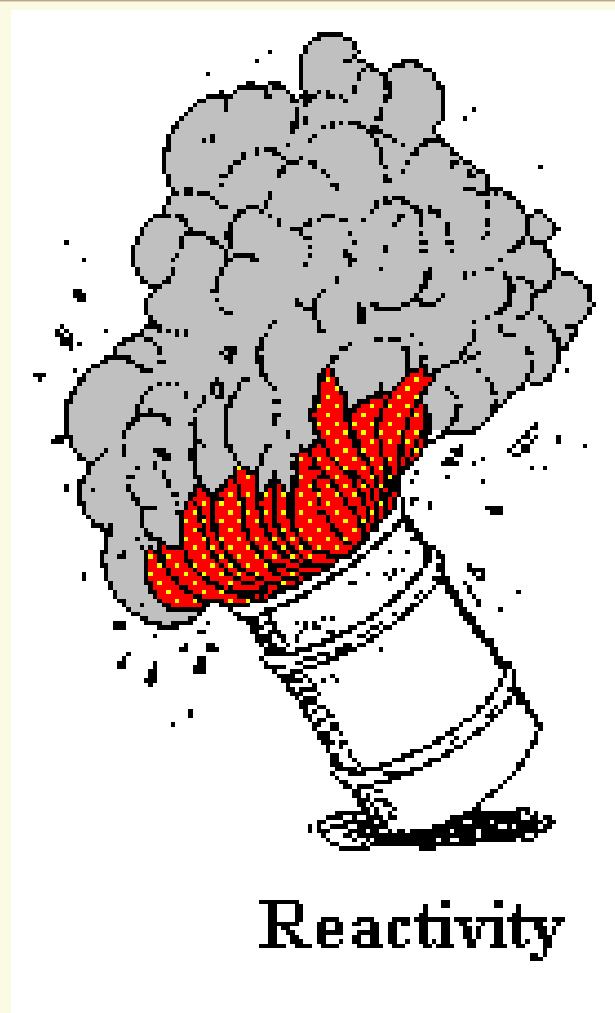
Corrosive (D002)



- pH 2 to 12.5
- Corrodes steel
- Solids (WA Only)
 - Waste Code: WSC2
 - May be considered “special waste”

Reactive (D003)

- Reacts w/ water, shock, heat or pressure
- Undergoes rapid/violent reaction
- Ex: perchlorates, peroxides, cyanides



Toxic (D004 – D043)

- 8 heavy metals,
- 10 pesticides,
- 22 organic chemicals
- Toxicity Characteristics Leaching Procedure (TCLP)
- Toxicity characteristics list with contaminant concentrations

WA-only designation (toxicity & persistence)



WA-only designation

Persistence

- Halogenated Organic Compounds (HOC)
 - WP02 if $<0.01\%$ - 1.0%
 - WP01 if $>1.0\%$
- Polycyclic Aromatic Hydrocarbons (PAH)
 - WP03 if $> 1\%$

Toxicity

- “Equivalent Concentration” (EC) of Hazardous Constituents
 - WT02 if $EC = 0.001\%$ - 1.0%
 - WT01 if $EC >1.0\%$

2. Is your business conditionally exempt?

It depends on your generator status:

- Conditionally Exempt Small Quantity Generators (CESQG)
- Medium Quantity Generator (MQG)
- Large Quantity Generator (LQG)

Conditionally Exempt Small Quantity Generators (SQG)

- Generate < 220 lbs. per month, and *never* accumulate over 2,200 lbs. on-site at one time.
- Generate < 2.2 lbs. of P-listed wastes, F020-F023, F026, F027 wastes or WT01 wastes.



Medium Quantity Generators (MQG)

(Oregon - Small Quantity Generator)

- Generate between 220 lbs. and 2,200 lbs of waste per month, and *never* accumulate over 2,200 lbs. on-site at one time.
- Generate and accumulate < 2.2 lbs. of P code wastes, F020-023, F026-027, WT01 wastes.

Large Quantity Generators (LQG)

- Generate over 2,200 lbs of waste per month, or accumulate over 2,200 lbs. on-site at one time.
- Generate and accumulate > 2.2 lbs. of P code wastes, F020-023, F026-027, WT01 wastes.

3. What's required?



Dangerous Waste Management (6 easy steps)

1. Put waste in containers.
2. Clean-up spills & prevent releases.
3. Store incompatibles separately, and use compatible containers.
4. Keep containers closed & in good condition.
5. Label containers
6. Transport and dispose of waste

Dangerous Waste Management (6 easy steps)

1. Place waste into containers.
NO dumping,
draining, tossing or
pitching waste
without a permit!



(No, it can't be dumped down the sink!)

Dangerous Waste Management (6 easy steps)



2. Clean up spills as they happen, and prevent future releases. Use “secondary containment” to catch releases.

(No, the little red wagon probably won't cut it!)

Dangerous Waste Management (6 easy steps)

3. Store incompatible wastes separately, and use containers compatible with waste.
4. Keep containers closed and in good condition.



Dangerous Waste Management (6 easy steps)

5. Label containers as “dangerous” or “hazardous”, and identify the risk (e.g. flammable, toxic, persistent, etc.).



Dangerous Waste Management (6 easy steps)

6. Properly transport and dispose of wastes.



You're responsible!

A spiral-bound notebook with a cream-colored page and a brown cover. The spiral binding is on the left side. A thin horizontal line is drawn across the page, just above the title.

Typical Problems

WATER
BASE
PAINT

**Unknown if
dangerous waste**







NO SMOKING

CLEAN
EMPTY
BARRELS

**Open containers;
no labels**





**Open containers (rings not secure),
no containment, no labels**



**What is that stuff in the open 55-gallon container?
Are the other containers product or waste?**









**Open containers;
Containers not labeled;
Evidence of spills**

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**If “bad thinner” is DW, then
must be labeled as such
and with the risk.**

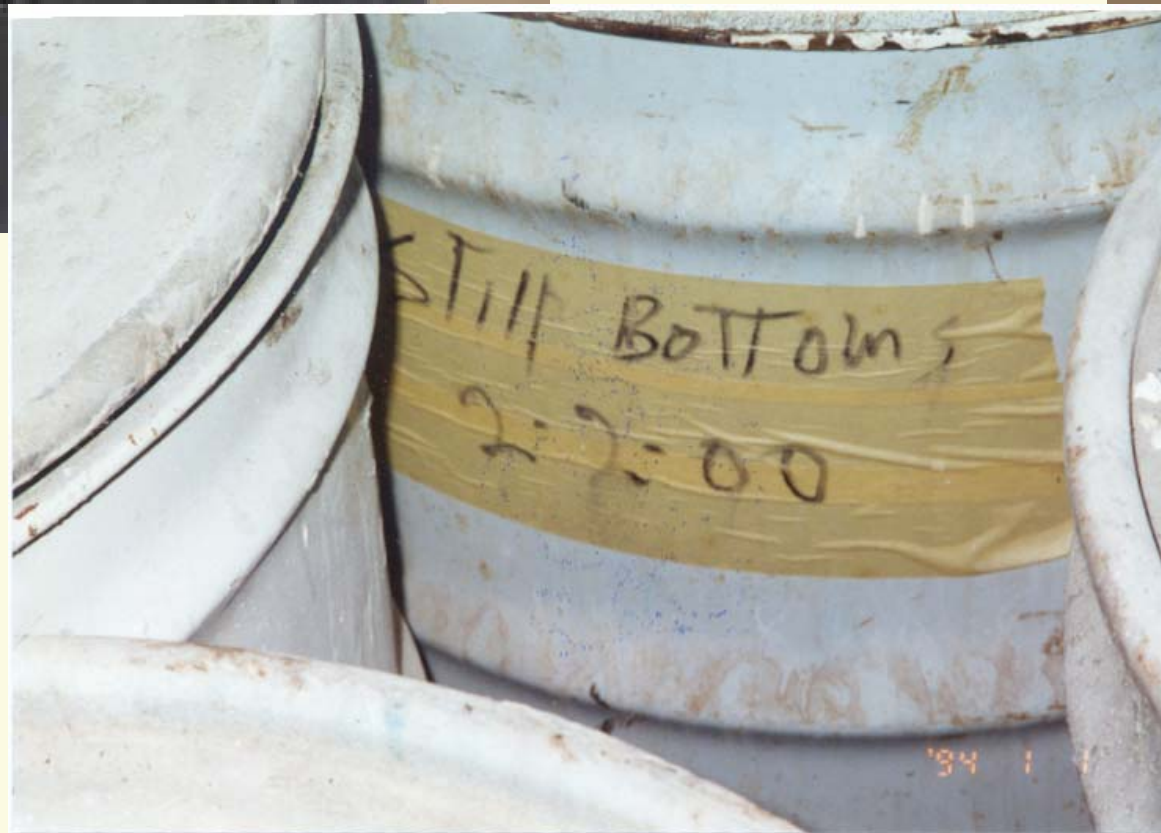
8 28 01

**Solvent based paints *cannot* be evaporated.
This would be OK for latex.**



Containers
weren't empty





What would help?

Good operations

- Routine inspections
- Employee training for routine & emergency operations
- Recordkeeping
- Reporting



Weekly Facility Inspection Checklist

Inspection for the week of _____

Accumulation

- _____ Are all drums and containers marked with hazardous waste label?
- _____ Are all drums and containers marked with a risk label, if appropriate?
- _____ Are all drums marked with the accumulation start date?
- _____ Are there any drums that are near or have exceeded the 90/180 day timeframe?
- _____ Are all drums marked with a proper waste code(s)?
- _____ Are all containers closed?
- _____ Are all drum labels visible and readable?
- _____ Are all drums and containers in good condition?
- _____ Is there 30 inches of aisle space between rows of containers?
- _____ Are any drums leaking?

Sumps

- _____ Are sumps clean and free of contamination, spills, leaks, and standing water?

Safety Equipment

- _____ Are fire extinguishes charged?
- _____ Are spill kits stocked?
- _____ Is the first aid cabinet stocked?
- _____ Is the emergency shower and eye wash station functioning properly?
- _____ Are the emergency communication devices operating properly?
- _____ Is emergency response information posted near all communication devices?

Secondary Containment

- _____ Is the secondary containment free of cracks or other failures?

Comments:

Describe the actions that you took to correct the deficiencies noted above, and the date the actions were taken _____

Printed Name _____ Signature _____

Date _____ Time _____

WEEKLY INSPECTIONS!

**Required for MQGs and LQGs,
recommended for SQGs**

How To Develop a Written Personnel Training Plan

WAC 173-303-330

- Step 1:** Identify positions that handle dangerous waste. Include those positions that:
- Add or remove waste from containers
 - Operate a recycling still, evaporator or wastewater treatment unit
 - Transfer waste from one area or container to another
 - Inspect dangerous waste accumulation areas
 - Label containers
 - Prepare waste for transport
- Step 2:** For each position identified, write a job description that includes the dangerous waste activities that are performed in that position.
- Step 3:** Identify the relevant training needs for each position
- Level One
 - Level Two
 - Level Three
- Step 4:** Train employees to do their job in compliance with the *Dangerous Waste* regulations.
- Step 5:** Document and keep training records.

Training Plan. Required for LQGs; recommended for MQGs and SQGs. Go to our website at:

http://www.ecy.wa.gov/programs/hwtr/reg_comp_guide/pages/regs_hazwaste.html for full guide. Some copies are available today.



Department of Ecology Hazardous Waste and Toxics Reduction Program

Publication Number 03-04-037

- ? Would you like to hear about Ecology's new easy-to-use on-line Turbowaste.net reporting system?
- ? Would you like to learn how to survive a compliance inspection?
- ? Would you like to ask Ecology employees questions in a relaxed atmosphere?

Then you want to attend one of our:

2004 Dangerous Waste Management Workshops

Where you will learn how to:

- ✓ Complete your annual report quickly and correctly with Ecology's new on-line format! It's for all generators, small, medium, or large.
- ✓ Avoid common compliance violations.
- ✓ Reduce waste to increase profits.
- ✓ Achieve the benefits of lower generator status.
- ✓ Use a process called "designation," to identify the hazards associated with your wastes.
- ✓ Manage your waste properly.
- ✓ Comply with the Emergency Planning and Community Right-to-Know Act.
- ✓ Prepare yourself for an unannounced compliance inspection.

Workshop Description and Schedule

The Washington State Department of Ecology will present a series of seven workshops for businesses that deal with various types of dangerous waste. The workshops will be held during January and February, 2004, in locations throughout the state, as detailed below. The workshops will cover a variety of topics on waste management, waste designation, container management, annual reporting, and pollution prevention. **These are the only locations and times scheduled for 2004. Register without delay; space is limited.**

These one-day workshops start promptly at 8:30 a.m. and end no later than 4:30 p.m. They include lunch, morning and afternoon refreshments, a workbook, and a personalized certificate of your participation. There is a charge of \$55.00 per person to cover the cost of the room rental, food and materials. **Important note: Payment must be made prior to attending the workshop, unless prior arrangements are made.**

Ecology employees will be available to answer your questions in a casual, friendly atmosphere. Don't miss this opportunity! For registration information, to check space availability, or to make payment arrangements call Tonya Wolfe at (360) 407-6023 or send an e-mail to twol461@ecy.wa.gov.

Dates in 2004	Location	Location Address
January 21	Mount Vernon	Best Western CottonTree Inn 2300 Market Street
January 23	Kelso	Red Lion Hotel Kelso 510 Kelso Drive
January 27-29*	Lynnwood	Embassy Suites (New location!) 20610 44th Avenue West
February 3	Yakima	DoubleTree Hotel Yakima Valley 1507 N First Street
February 5	Spokane	Mirabeau Park Hotel (formerly Doubletree Hotel) N 1100 Sullivan Road

*Note that these dates (January 27, 28, and 29th) are separate workshop dates. Please register for only one date.

If you have special accommodation needs or require information in an alternative format, please call Ecology's Hazardous Waste and Toxics Reduction Program at (360) 407-6700 (voice). For the speech or hearing impaired, dial 711 or call (800) 833-6388 (TTY).



Recordkeeping

- Keep copies of:
 - ✓ Your most recent Notification Form 2
 - ✓ Dangerous waste annual reports
 - ✓ Your inspection forms
 - ✓ All manifests, land disposal restriction forms, bills of lading (for at least five years)
- LQGs must keep copies of:
 - ✓ Contingency plan (spill prevention and emergency response)
 - ✓ Training plan and training records

Reporting

Spills, fire, explosions, or releases of dangerous waste must be reported to appropriate local authorities, DEQ, Ecology, and potentially the National Response Center, (800)424-8802.



4. Where can you get help?



Technical Assistance

- Non-enforcement help from Ecology, Clark County and others
- On-site assistance
- On-line resources and Guidance.

On-line resources

Manage Waste - Microsoft Internet Explorer provided by Dept. of Ecology

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Address <http://www.ecy.wa.gov/programs/hwtr/managewaste.html> Go Links Best of the Web

 **Washington State Department of Ecology**
Hazardous Waste & Toxics Reduction Program
[Hazardous Waste Management](#) | [Reporting Requirements](#) | [Hazardous Chemicals in Your Community](#)
[Reducing Hazardous Waste & Hazardous Substances](#) | [HWTR Program Overview](#) | [Publications](#) | [Site Map](#)

Hazardous Waste Management Requirements

- [Chapter 173-303 WAC: Dangerous Waste Regulations](#)
A copy of the regulations with electronic cross references in PDF (requires [Adobe Acrobat Reader](#) to view)
- [Hazardous Waste Regulatory Information and Assistance](#)
Regulatory Information at your finger tips. A must for all large, medium, small quantity generators, treatment, storage and disposal facilities
- [Workshops](#)
Find out when and where you can attend workshops and get the latest information from Ecology staff.
- [Hazardous Waste Labels](#) A small program you can download onto you computer to print the "right" label for your wastes
- [Demolition Debris Information](#)
A guide to current Hazardous Waste rules that apply to building construction, renovation, and demolition sites in Washington State.
- [Hazardous Waste Permits](#)
Learn how to obtain a permit to treat, store, or dispose of hazardous waste and find out if there is a draft permit -- or permit modification -- available for public comment.

Internet


On-line resources

Regulatory Information and Help - Microsoft Internet Explorer provided by Dept. of Ecology

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Address http://www.ecy.wa.gov/programs/hwtr/reg_comp_guide/in/ Go Links Best of the Web

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REGULATORY INFORMATION & ASSISTANCE	"IDENTIFY YOUR WASTE" REQUIREMENTS	WASTE SPECIFIC REQUIREMENTS	INDUSTRY SPECIFIC REQUIREMENTS	HAZ WASTE GENERATOR REQUIREMENTS	HAZ WASTE ID & ANNUAL REPORTING	SMALL QUANTITY GENERATOR	DANGEROUS WASTE REGULATIONS
WORKSHOPS	HELPFUL ARTICLES	SITE MAP	COMPLIANCE CONTACTS	HAZARDOUS WASTE SERVICES DIRECTORY	SEARCH		

<p><u>Identify Whether Your Waste is Hazardous Waste</u></p> <p>If you generate a hazardous waste(s), your company must manage these wastes according to State dangerous waste regulations. Go to "Requirements for Generators of Hazardous Waste"</p>	<p><u>Hazardous Waste Generators Requirements</u></p> <p>How to manage, accumulate, and get rid of hazardous waste. Requirements and assistance on container management, labeling, secondary containment, record keeping, training and contingency plans, etc.</p>
<p><u>Small Quantity Generator Requirements</u></p> <p>This means you generate and/or accumulate a small amount (NEVER generate more than 220 pounds per month and NEVER accumulate more than 2,200 pounds on site) of hazardous waste.</p>	<p><u>Hazardous Waste ID # and Annual Reporting</u></p> <p>If you are a Large Quantity or Medium Quantity Generator of hazardous waste, you MUST have a hazardous waste identification number. If you are a Small Quantity Generator, the company</p>

Done Internet

On-line resources

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If You Generate Hazardous Waste...

Here are Some Step by Step Guidance for the Regulations You Must Follow:

[Identify Your Waste and Generator Requirements](#)
(Open Document)

[How to Determine What is Hazardous Waste](#) (Designation Flow Diagram)

[Checklist for Hazardous Waste Generators](#)
(Open Document)

[Categories of Hazardous Waste](#)
(Open Document)

Internet

On-line resources

Hazardous Waste Facilities - Microsoft Internet Explorer provided by Dept. of Ecology


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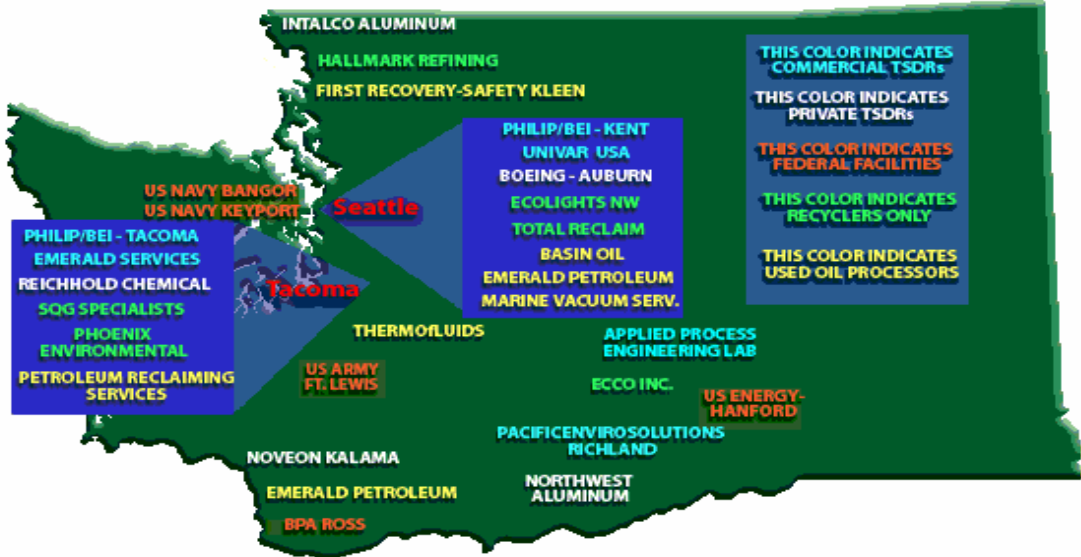
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[List of Active Facilities](#)
[How to choose a HW Contractor](#)
[Definitions](#)
[Links to Other Resources](#)
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Active Hazardous Waste and Used Oil Facilities in Washington State

29 companies and agencies in Washington can treat, store, dispose or recycle hazardous waste (TSDF) or process used oil. 20 facilities accept wastes from other businesses on a commercial basis.

Select a site from the map below or from the Active Facilities list in the box on the left, to obtain compliance and permitting information on individual facilities.



Legend:

- THIS COLOR INDICATES COMMERCIAL TSDFs
- THIS COLOR INDICATES PRIVATE TSDFs
- THIS COLOR INDICATES FEDERAL FACILITIES
- THIS COLOR INDICATES RECYCLERS ONLY
- THIS COLOR INDICATES USED OIL PROCESSORS

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Thanks!

*Thank you for attending this presentation.
We hope it has been helpful.
Please contact us if you have any questions.*

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(360) 407-6342

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